

Before the
Federal Communications Commission
Washington, D.C.

In the Matter of)	RM-11305
Petition For Rule Making)	
Amendment of Part 97 of FCC Amateur Service)	
Rules to Eliminate Mode-Based Subbands)	

Comments of James P. Miccolis, N2EY

Introduction

I am submitting these comments in response to RM-11305, to oppose the proposed removal of mode-based subbands in the Amateur Radio Service.

I am an electrical engineer with BSEE and MSEE degrees from the University of Pennsylvania and Drexel University, respectively, and am employed full time in the design of control systems for the transportation industry. I am coinventor of US Patent 5,358,202. I am also an amateur radio operator, first licensed by the Commission in 1967, and currently hold an Amateur Extra class license. My interest in amateur radio at an early age led me to pursue a career in electrical engineering.

I oppose the changes proposed by the “Communications Think Tank” (CTT) in RM-11305. There is no need to eliminate the separation of modes on the amateur HF bands.

The changes proposed would turn the amateur HF bands into a “free-for-all” of modes ranging from Morse Code (CW) to “hi-fi” AM and FM to automatic “robot” digital modes. Such an environment will not promote the best utilization of the limited HF bandwidth available to radio amateurs.

The following are reasons to deny the proposals contained in RM-11305

Reason 1: Some Modes Don’t Mix Well

A radio receiver that is optimized for reception of a wide-bandwidth mode (such as AM voice) will, of necessity, not be optimized for a narrow-bandwidth mode such as PSK31. The user of such a receiver may not even hear narrow-bandwidth signals in the passband of the receiver. The potential for unintentional interference is obvious. The opposite situation (narrow-bandwidth receiver is not optimized for wide-bandwidth modes) is also true.

It is simple common sense to keep narrow- and wide-bandwidth signals separated in the amateur HF bands, as is done under current regulations.

Reason 2: Spectrum Efficiency

The separation of narrow- and wide-bandwidth modes by regulation offers radio amateurs a clear incentive to develop and utilize spectrum-efficient modes. Modes such as CW and PSK31 use a tiny fraction of the spectrum required for AM or SSB voice, and so permit more amateurs to enjoy a given band simultaneously. If the spectrum currently reserved for such spectrum-efficient modes is opened to wide-bandwidth modes as well, that incentive is reduced or eliminated.

Reason 3: Automatic Operation

Current FCC rules allow automatic and semi-automatic digital operation on specified sections of the various HF bands. These rules effectively control possible interference from 'robot' stations without unduly reducing the effectiveness of automatic operation. RM-11305 would eliminate this control, allowing automatic and semiautomatic operation on any frequency. Since many of these digital modes are not decodeable by amateur stations not equipped for the specific mode in use, identification of interfering automatic stations will be impractical.

Reason 4: CTT Has Not Made Their Case

RM-11305 proposes radical changes to the present rules, but does not provide a convincing reason for such radical changes other than the opinions of the writers of the proposal, and a flawed 'survey' of band usage.

The most glaring flaw in the CTT survey is that it consisted of a single monitoring effort over a single 12 hour period from a single location, using equipment that was clearly not optimized for reception of narrow bandwidth modes, particularly digital modes such as PSK31. Despite the results, which show a ratio of about 1:1.75 for narrow:wide bandwidth modes, CTT proposes that all frequencies be available to wide-bandwidth modes without concern for the impact of such a change on narrow-bandwidth modes.

Reason 5: Free Upgrades for Novices and HF-Authorized Technicians

RM-11305 proposes that licensees of all classes be allowed to use all authorized modes on the frequencies allocated to their license class. This

change would radically increase the modes available for HF operation by existing Novices and Technicians with HF privileges. Such an expansion of privileges would effectively act as a disincentive for those amateurs to upgrade to General or Amateur Extra, and is contrary to the purpose of multiple license classes

Conclusion

While there may be some reason to adjust the mode-based subbands on the amateur HF bands, the radical changes proposed in RM-11305 would most likely simply result in chaos. I urge the Commission to deny all proposed changes of RM-11305 without further action.

Respectfully submitted,

James P. Miccolis